

Seasonal allergies: nothing to sneeze at

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Seasonal allergic rhinitis or 'hay fever' is a common condition experienced by about 20% of the population. It is an inflammatory condition that occurs in response to inhaled airborne particles called allergens which are present during certain times of the year. Allergens such as pollen from trees, grasses and weeds as well as moulds trigger the release of chemicals (mainly histamine) in persons allergic to the allergens, resulting in inflammation of the mucous membranes of the nose (rhinitis) and/or eyes (conjunctivitis). Warmer temperatures, as well as higher levels of carbon dioxide due to global warming result in plants growing more rapidly thus producing more pollen than normal.

Symptoms

Unlike its name suggests, there is no fever associated with hay fever. Symptoms of seasonal allergies occur when a susceptible person inhales the allergen (such as pollen), causing the cells in the lining of the nasal mucosa to release histamine and other chemicals, resulting in inflammation. The allergic response usually starts with sneezing followed by a runny nose (rhinorrhoea) then progressing to nasal congestion. In most cases, symptoms are more severe during the morning and in the evening. This could be attributable to the levels of pollen increasing during the day after being released in the morning, and which settles overnight. On windy days, pollen is scattered and this can cause worsening of symptoms, while symptoms are reduced on rainy days when pollen levels are low.

While the discharge from a runny nose is thin, clear and watery, a secondary infection would be indicated by a thicker, coloured and purulent discharge and the patient should be referred to the doctor. Headache or earache may occur when there is severe nasal congestion. Nasal itching is

common while irritation on the roof of the mouth sometimes occurs. Eyes may also itch and become red and watery.

Management

Although avoidance of allergens is the best way to prevent seasonal allergies, this may not always be practical. It is advisable to:

- Avoid areas with long grass or areas where grass is being cut
- Stay indoors as much as possible during hay fever season and keep doors and windows closed
- Stay inside during the late morning and early evening when the pollen count is at its highest.

The treatment of seasonal allergies should include reducing exposure to allergens (where possible) as well as the following treatment options:

Normal saline

Normal saline nasal sprays or rinses are an effective way to clear allergens from the nasal passages. It is also a useful way to treat drainage down the back of the throat, sneezing, nasal dryness and congestion. Patients should be advised to perform a nasal rinse before using their medicated nasal sprays to get an enhanced benefit from the medication.

Patients should use at least 200 ml of saline solution per nostril for irrigation. The required amount of solution should be poured out into a bowl and may be warmed slightly, but should not be hot. Fill a syringe with water from the bowl and then squirt the solution into one nostril at a time aiming at the back of the head (do not aim towards the top of the head). Keep the head tilted slightly forward over a sink or in the shower when you rinse. The solution should go into

one nostril and come out at the other nostril. Although some patients may experience a slight burning sensation initially, this usually subsides with repeated irrigations. Swallowing small quantities of the solution is not harmful. The rinsing may be performed once or twice daily, depending on the severity of the allergy. Saline irrigation is more effective than using a saline nasal spray.

It is important to administer nasal sprays correctly for maximum efficacy. The head should be tilted slightly forward to avoid the spray from running down the back of the throat. Inside the nostril, the nozzle should be directed towards the outer wall, away from the septum (middle of the nose). After administering the spray, the patient should sniff gently to pull the spray into the higher parts of the nose.

Topical corticosteroids

Topical intranasal corticosteroids should be considered the first-line treatment for allergic rhinitis. They are effective in treating all four of the major symptoms associated with seasonal allergic rhinitis: itching, sneezing, runny nose and congestion. Beclomethasone, fluticasone and mometasone are cortisone nasal sprays available without prescription. Treatment usually starts with the maximum dose to get symptoms under control and can then be reduced to the minimum effective dose for maintenance. Side-effects are usually mild and related to an unpleasant smell or taste and drying or bleeding of the nasal membranes. To minimise side-effects, patients can reduce the dose, stop treatment temporarily, use a moisturising spray or use a water-based formulation instead of an alcohol-based product.

Although corticosteroid sprays provide relief within one day, it may take days to weeks to reach maximum beneficial effect. Patients with intermittent symptoms can use these sprays when necessary, but should start and continue treatment for at least two days before and after exposure.

Antihistamines

Antihistamines work by counteracting histamine, which is released when the immune system comes into contact with an allergen. Nasal sprays containing antihistamines work within 15 minutes and can be used when necessary. Nasal sprays with an antihistamine such as azelastine and levocabastine are available in South Africa and alleviate itching, sneezing and rhinorrhoea.

Oral antihistamines are less effective than corticosteroid nasal sprays, but are an option for patients with mild or intermittent symptoms. Oral antihistamines such as diphenhydramine and chlorpheniramine may cause drowsiness/sedation while "newer" antihistamines tend to be non-sedating. These non-sedating antihistamines include cetirizine, levocetirizine, loratadine, desloratadine, fexofenadine and ebastine, which

are preferred for patients who have to drive, study or work and are taken once daily. While antihistamines reduce most symptoms of seasonal allergies, they are generally not effective in relieving symptoms of nasal congestion.

Decongestants

Nasal decongestants are effective in reducing congestion and relieving sinus pressure, but should be used for short periods only (no longer than seven to ten days) at a time. Using topical decongestants for extended periods can lead to rebound nasal congestion which means that the nasal spray is not effective any more to reduce congestion. Several products containing decongestants such as oxymetazoline, phenylephrine and xylometazoline are available in South Africa. Decongestant sprays may be used for a few days when initiating treatment with a corticosteroid or antihistamine nasal spray to alleviate symptoms until the cortisones are fully effective.

When to refer

A tight chest, wheezing, shortness of breath or a cough warrant immediate referral as this is indicative of an asthma attack. Earache and facial pain may indicate a secondary infection, which would need antibiotics. Although irritated, watery eyes are common with hay fever, this may be complicated by a secondary infection. This results in eyes becoming red and painful (gritty sensation), and discharge changing to becoming coloured and sticky.

Conclusion

Red watery eyes, runny nose and sneezing are often signs that spring is in the air. Although seasonal allergies are not life-threatening, they can have a severe impact on quality of life and can lead to other complications. Patients should be assured that these allergies can be managed effectively resulting in a substantial improvement in their quality of life.

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